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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/745,896	12/21/2000	Yoshitake Ishii	99292	2637

23165 7590 03/28/2005

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EXAMINER

MANOHARAN, VIRGINIA

ART UNIT	PAPER NUMBER
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1764

DATE MAILED: 03/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

4)

**Office Action Summary**

Application No.

09/745,896

Applicant(s)

ISHII ET AL.

Examiner

Virginia Manoharan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 01 January 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8, 13-19 and 21 is/are rejected.
- 7) ☐ Claim(s) 9-12 and 20 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                      |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)</p> <p>2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</p> <p>3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br/>Paper No(s)/Mail Date _____.</p> | <p>4) <input type="checkbox"/> Interview Summary (PTO-413)<br/>Paper No(s)/Mail Date. _____.</p> <p>5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)</p> <p>6) <input type="checkbox"/> Other: _____.</p> |
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### DETAILED ACTION

The drawings filed on December 21, 2000 have been approved.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-8, 13-19 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bauer, Jr. et al (5,759,358) in view of Fauconet (6,352,619).

The above references are applied for the same combined reasons as set forth at page 2 of the previous Office Action, i.e., the Final Rejection of October 5, 2004.

Claims 9-12 and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 13 is allowed.

Applicant's arguments filed January 1, 2005 have been fully considered but they are not persuasive.

Applicants arguments such as:

"Comparative Example 4 cannot be applied as against applicant because the column in comparative Example 4 suffered from heavy polymer and other solids formation and after 30 minutes was forced to shut down. Comparative Example 4 is an inoperative example. This is the first reason why comparative Example 4 cannot be cited as against applicant..." is not considered well-taken. The shutting down because

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of inoperativeness is not readily apparent from Example 4 of the Bauer reference. Nonetheless, the claims are not limited especially to the argued polymer and solids formation commensurate in scope with the claimed invention. In fact, as admitted by applicants "The composition of the crude acrylic acid is almost the same between Comparative Example 4 and the present invention".

Furthermore, the argument of inoperativeness of the primary references is of no patentable moment. While there may be a factual dispute as to the operability of the Bauer's reference as alluded to by applicants, however, we need only to determine whether or not the reference could be obviously be made operative by an artisan with the mere use of skill. If the subject matter thereof could so obviously be made operative, then the Bauer references is a good reference. See *In re Jacobs* 50 CCPA 1316, 318 F. 2d 743, 137 USPQ 888 (1963).

Applicants' argument "... that a different result will be brought if the timing of addition of an aldehyde treatment chemical differs even if the composition of the crude acrylic acid is the same..." is not understood since at the same breadth, applicant state that "The concentration ratio of furfural to acrolein by weight is 3.9(270 ppm/69 ppm) in comparative Example 4 of the Bauer, Jr. et al. reference, which ratio falls within the claimed range.."

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Sakamoto et al and . Aichinger et al. both disclose a method for distilling feed containing (meth) acrylic acid.


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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Virginia Manoharan whose telephone number is 571-271-1450. The examiner can normally be reached on Tuesday-Friday from 7:30 am to 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on (571) 272-1444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

V. Manoharan/af  
March 18, 2005

  
VIRGINIA MANOHARAN  
PRIMARY EXAMINER  
ART UNIT 1281 764